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(57) Abstract: Novel strains of *Bifidobacterium* *hifidum* capable of producing a novel galactosidase enzyme activity that converts lactose to a novel mixture of galactooligosaccharides. The mixture of oligosaccharides may be incorporated into numerous food products or animal feeds for improving gut health by promoting the growth of bifidobacteria in the gut, and repressing the growth of the pathogenic microflora.

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